Amendments To The Claims

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (currently amended) A separator for separating a multiphase ~~flow~~fluid into selected lighter and heavier fluids, the separator comprising:

a circular tubular having a downwardly facing outer section, an upwardly facing inner section, a tubular bore, and an inlet for the~~a~~ multiphase fluid to flow into the tubular bore;

~~a plurality of outlets, at least one for each selected separated phase~~; and

the flow through the tubular bore causing~~a main annular tubular bore through which~~ the multiphase fluid~~flow is caused to flow and~~ to separate into selected lighter and heavier fluids, the circular~~main annular~~ tubular ~~bore~~ having a tangential outlet on the upwardly facing inner section in the direction of flow to separate selected~~an outlet for each of the~~ lighter fluids and a tangential outlet on the downwardly facing outer section in the direction of flow to separate selected heavier fluids.

2. (currently amended) A separator according to claim 1, wherein the inlet is a tangential entry, thereby causing the fluid to circulate through the ~~main annular~~ tubular bore.

3. (currently amended) A separator according to claim 1, wherein the flow area of the ~~main annular~~ tubular bore diameter is at least twice the flow area of the inlet to allow a stable rotating flow ~~to establish~~.

4. (canceled)

5. (canceled)

6. (currently amended) A separator according to claim 1, further comprising another~~a first additional~~ tubular ~~bore~~ located below, and in fluid communication with, the heavier fluid outlet, the another tubular~~first additional bore~~ causing further separation of the flow into lighter and heavier fluids and having an outlet for each of the lighter and heavier fluids.

7. (currently amended) A separator according to claim 1, further comprising another~~a second additional~~ tubular ~~bore~~ located above, and tangentially in fluid communication with, the lighter fluid outlet, the another tubular~~second additional bore~~ causing further separation of the flow into lighter and heavier fluids and having an outlet for each of the lighter and heavier fluids.

8. (currently amended) A separator according to claim 6, wherein the inlet into the another tubular~~first additional bore~~ is tangential.

9. (currently amended) A separator according to claim 1, further comprising a spiral conduit connected to at least one of the outlets, the spiral conduit~~conduit(s)~~ having a smaller flow diameter than ~~any of~~ the circular~~annular~~ tubular ~~bores~~, thereby increasing the fluid velocity to enable further separation of the fluids into the selected lighter and heavier fluids~~desired phases~~.

10. (currently amended) A separator according to claim 9, wherein the spiral conduit includes a plurality of parallel coils having a common diameter~~is a parallel sided spiral coil having the same coil diameter as the spiral coil above~~ to allow the flow to stabilize.

11. (currently amended) A separator according to claim 9, wherein the spiral conduit includes a plurality of tapered coils having consecutive reduced outer diameters~~each conduit defines an envelope, at least part of the envelope being tapered such that the diameters of consecutive loops of the conduit are reduced~~.

12. (previously presented) A separator according to claim 9, wherein the bore diameter of the conduit is reduced in the direction of flow therethrough.

13. (currently amended) A separator according to claim 9, wherein the parallel and tapered coils have a slope at an angle~~angle of slope of the pipework in the coil of the spiral relative~~ to the circular tubular~~annular bore(s)~~, the angle increasing ~~increases~~ as the fluid flows through the spiral conduit to control the flow from a ~~relative to the~~ previous coil~~section~~.

14. (currently amended) A separator according to claim 9, further comprising ~~of~~ one or more outlets from the spiral conduit to allow for the further separation of lighter and heavier fluids.

15. (currently amended) A separator according to claim 9, further comprising one or more drain and/or vent conduits communicating ~~from~~ the spiral~~each~~ conduit with another~~into a~~ tubular bore.

16. (currently amended) A separator according to claim 15, wherein the drain and/or vent conduits exit the spiral conduit~~conduit(s)~~ tangentially and in the direction of flow to collect the selected lighter or heavier fluid~~required phase~~.

17. (currently amended) A separator according to claim 1, further comprising a slurry~~an~~ outlet on the spiral conduit for the removal of a solid slurry.

18. (currently amended) A separator according to claim 1, wherein the circular~~annular~~ tubular ~~bore(s)~~ is substantially horizontal~~(are) circular~~.

19. (currently amended) A separator according to claim 7, wherein the ~~inlet into the second additional~~another tubular has a~~bore is~~ tangential inlet.